

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): An apparatus for receiving a digital broadcast signal that is available to receive a digital satellite broadcast signal via an antenna comprising:

a detecting circuit configured to orthogonally detect ~~for orthogonally detecting~~ a received signal sent from the antenna to a baseband signal;

a carrier/noise (C/N)-value-calculating circuit configured to measure ~~for measuring~~ an average value of amplitude in a radial direction of signal points of phase mapping of the baseband signal obtained by the detecting circuit to calculate a carrier/noise ratio for the received signal;

a phase-noise-amount-calculating circuit configured to measure ~~for measuring~~ an average value of amplitude in a circumferential direction of signal points of the phase mapping of the baseband signal to calculate an amount of phase noise of the received signal;

a bit-error-rate-measuring circuit configured to measure ~~for measuring~~ a bit-error rate of transport stream that is given by demodulating the baseband signal;

a determining circuit configured to determine ~~for determining~~ a factor in deterioration for receiving characteristics of the antenna based on results of the C/N-value-calculating circuit, the phase-noise-amount-calculating circuit, and the bit-error-rate-measuring circuit; and

a measure-mode-setting circuit configured to set ~~for setting~~ a desired measure mode based on the determination result of the determining circuit.

Claim 2 (Currently Amended): The apparatus for receiving a digital broadcast signal according to claim 1 ~~in which the~~ wherein the measure-mode-setting circuit is configured to set the desired measure mode to one of ~~includes~~:

a first measure mode responding to a case where carrier/noise ratio is low;  
a second measure mode for improving deterioration for receiving characteristics due to phase noise of local oscillator in a frequency converter accompanied with the antenna; and  
a third measure mode for improving deterioration for receiving characteristics due to parasitic oscillation of the local oscillator in the frequency converter accompanied with the antenna.

Claim 3 (Currently Amended): A method for receiving a signal in an apparatus for receiving a digital broadcast signal that is available to receive a digital satellite broadcast signal via an antenna, the method comprising:

~~detection step~~ of orthogonally detecting a received signal sent from the antenna to a baseband signal;

~~carrier/noise (C/N) value calculating step~~ of measuring an average value of amplitude in a radial direction of signal points of phase mapping of the baseband signal obtained in the orthogonally detecting ~~detection step~~ to calculate a carrier/noise ratio for the received signal;

~~phase noise amount calculating step~~ of measuring an average value of amplitude in a circumferential direction of signal points of the phase mapping of the baseband signal to calculate an amount of phase noise of the received signal;

~~bit error rate measuring step~~ of measuring a bit-error rate of transport stream that is given by demodulating the baseband signal;

~~determining step~~ of determining a factor in deterioration for receiving characteristics of the antenna based on results of the measuring an average value of amplitude in a radial direction, measuring an average value of amplitude in a circumferential direction, and measuring a bit error rate ~~C/N value calculating step, the phase noise amount calculating step, and the bit error rate measuring step~~; and

~~measure mode setting step~~ of setting a desired measure mode based on the determination result of the determining ~~step~~.

Claim 4 (New): The apparatus for receiving a digital broadcast signal according to claim 2 wherein the detecting circuit is configured to set a bandwidth of noise in the second measure mode to a value greater than a bandwidth of the noise in the first measure mode.

Claim 5 (New): The apparatus for receiving a digital broadcast signal according to claim 2 wherein the detecting circuit is configured to set a bandwidth of noise in the third measure mode to a value greater than or equal to a bandwidth of the noise in the second measure mode.

Claim 6 (New): The apparatus for receiving a digital broadcast signal according to claim 2 wherein the detecting circuit is configured to set a dumping factor in the second measure mode to a value greater than a dumping factor in the first measure mode.

Claim 7 (New): The apparatus for receiving a digital broadcast signal according to claim 2 wherein the detecting circuit is configured to set a dumping factor in the third measure mode to a value greater than or equal to a dumping factor in the second measure mode.